



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/685,471

10/16/2003

Eog-Kyu Kim

1293.1830

5439

21171

7590

03/29/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

SWERDLOW, DANIEL

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,471

Applicant(s)

KIM, EOG-KYU

Examiner

Daniel Swerdlow

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15, 17, 18, 22, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 9, 16, 19, 21 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3 March 2006 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1 through 6, 8, 10, 11, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US Patent 6,005,923).**

4. Regarding Claim 1, Lee discloses a data access arrangement (Figs. 1, 2) that corresponds to the telecommunication terminal device claimed and comprises: tip (18) and ring (20) lines and voice lines (22) that together correspond to the network connection unit claimed with the tip (18) and ring (20) lines corresponding to the first and second pins claimed to which the public telephone network is connected (column 3, lines 64-66) and the voice lines corresponding to the third and fourth pins claimed through which a telephone handset (36, 224) that corresponds to the first external terminal type claimed is connected to the tip (18) and ring (20) lines that

Art Unit: 2615

correspond to the first and second pins claimed according to a voice relay (24, 228) that corresponds to part of the first switching unit claimed; a voice switch (228) and CID circuit switch (208) that together correspond to the first switching unit claimed and selectively connect the telephone handset (36, 224) that corresponds to the first external terminal type and a modem hybrid (204) that corresponds to the second external terminal device claimed with the public telephone network (column 4, lines 22-29); a two-wire connection that corresponds to the first external terminal connection claimed to a modem hybrid (204) that corresponds to the second external terminal device claimed, the two wires corresponding to the fifth pin and the sixth pin claimed; and a DC current sink (216) that corresponds to the feeding circuit claimed and produces a current flow to take the telephone line off hook (i.e., keep a current provided from the public telephone network flowing) (column 8, lines 16-19). That the telephone handset (36, 224) that corresponds to the first external terminal type claimed and the modem hybrid (204) that corresponds to the second external terminal device claimed are of different connection type interfaces is shown at least by the capacitor in Fig. 2 that indicated that the modem hybrid is of an AC only interface type while the telephone handset is of a combined AC and DC interface type.

5. Regarding Claim 2, Lee further discloses an off hook switch (214) that with the voice switch (228) corresponds to the second switching unit claimed and selectively connects the tip line that corresponds to the first pin claimed to the voice line that corresponds to the third pin claimed and the DC current sink (216) that corresponds to the feeding circuit claimed (column 5, lines 50-53).

Art Unit: 2615

6. Regarding Claims 3 and 4, Lee further discloses a current sink loop (222) that corresponds to the transmission line claimed and connects the DC current sink (216) that corresponds to the feeding circuit claimed and the ring line that corresponds to the second pin claimed, with the voice switch (228) that corresponds to part of the first switching unit claimed selectively connecting the voice line that corresponds to the fourth pin claimed with current sink loop (222) that corresponds to the transmission line claimed and the CID switch (208) that corresponds to part of the first switching unit claimed selectively connecting the modem hybrid connection that corresponds to the sixth pin claimed with current sink loop (222) that corresponds to the transmission line claimed.

7. Regarding Claims 5 and 6, Lee further discloses a line current sense detector (217) that corresponds to the external terminal detection unit claimed, is connected between the CID switch (208) that corresponds to part of the first switching unit claimed and the tip (18) and ring (20) lines that correspond to the first and second pins claimed and detects an off-hook condition of the modem (i.e., whether signals are transmitted between the second external terminal device and the public telephone network) (column 5, lines 61-63).

8. Regarding Claim 8, Lee discloses a data access arrangement (Figs. 1, 2) that permits the transmission of voice only with a telephone (36, 224) that corresponds to the first external terminal device claimed or the transmission of data only with a modem (14, 204) that corresponds to the second external terminal device claimed (column 4, lines 22-29).

9. Regarding Claim 10, Lee further discloses the connection of the telephone (36, 224) that corresponds to the first external terminal device claimed in a parallel connection mode (Fig. 3, column 6, lines 26-37).

Art Unit: 2615

10. Regarding Claim 11, Lee further discloses simultaneous connection of the telephone (36, 224) that corresponds to the first external terminal device claimed and the modem (14, 204) that corresponds to the second external terminal device claimed (column 4, lines 22-29) in a parallel connection mode (Figs. 2, 3).

11. Regarding Claim 14, Lee further discloses a loop current sense (217) that detects the hook state of the modem (14, 204) that corresponds to the second external terminal device claimed (column 5, lines 61-63; column 8, lines 7-14).

12. Regarding Claim 15, Lee further discloses terminating a modem connection (i.e., opening a connection to disconnect an established connection between the second external terminal device and public telephone network) when an extension telephone goes off hook (column 7, lines 48-52).

13. **Claims 8, 11 through 13, 17, 18, 22, 24, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Gish (US Patent 5,724,554).**

14. Regarding Claims 8, 11 and 12, Gish discloses a modem (Fig. 1, reference 9) that corresponds to the telecommunication terminal device claimed and is operated according to a method (Fig. 2) comprising: if a serial interface that corresponds to the first external terminal device of a first type claimed is selected to be connected through the modem that corresponds to the telecommunication terminal device claimed to a telephone line (column 1, lines 30-34) that corresponds to the public telephone network claimed (Fig. 2, step 102, negative branch), establishing a serial connection interface (Fig. 2, steps 112, 114, 116; column 4, lines 7-12) between the telephone line that corresponds to the public telephone network claimed and the

Art Unit: 2615

serial interface that corresponds to the first external terminal device of a first type claimed; if a parallel interface that corresponds to the second external terminal device of a second type claimed is selected to be connected through the modem that corresponds to the telecommunication terminal device claimed to a telephone line (column 1, lines 30-34) that corresponds to the public telephone network claimed (Fig. 2, step 102, positive branch), establishing a parallel connection interface (Fig. 2, steps 104, 106, 108; column 4, lines 1-6) between the telephone line that corresponds to the public telephone network claimed and the parallel interface that corresponds to the second external terminal device of a second type claimed.

15. Regarding Claim 13, Gish further discloses a gate (Fig. 1, reference 30; column 3, lines 10-12) that corresponds to the first switching unit claimed, the output of which determines which connection type will be enabled (column 3, lines 5-42).

16. Regarding Claim 17, Gish discloses a modem (Fig. 1, reference 9) that corresponds to the telecommunication terminal device claimed, is used with a telephone line (column 1, lines 30-34) that corresponds to the public telephone network claimed and serial and parallel interfaces (14, 20) that correspond to the external terminal devices of different types claimed and comprises: an interface that corresponds to the network connection unit claimed to transmit and receive signals on the telephone line that corresponds to the public telephone network claimed (column 1, lines 30-34); a serial cable (Fig. 1, reference 12; column 3, lines 13-16) that corresponds to the first external terminal connection unit claimed and serially connects a serial interface that corresponds to the first external terminal device claimed to the telephone line that corresponds to the public telephone network claimed according to a gate (Fig. 1, reference 30;

Art Unit: 2615

column 3, lines 10-12) that corresponds to the first switching unit claimed being in a first state; a parallel cable (Fig. 1, reference 18; column 3, lines 39-41) that corresponds to the second external terminal connection unit claimed and connects a parallel interface that corresponds to the second external terminal device claimed in parallel to the telephone line that corresponds to the public telephone network claimed according to the gate (Fig. 1, reference 30; column 3, lines 36-39) that corresponds to the first switching unit claimed being in a second state; with the gate (30) that corresponds to the first switching unit claimed connected between the cables (18, 12) and the telephone line that corresponds to the public telephone network claimed so that the interface corresponding to the switch state is enabled.

17. Regarding Claim 18, Gish further discloses a modem and cable combination (Fig. 1, reference 12, 18) that corresponds to the connection unit claimed and comprises the interface that corresponds to the network connection unit claimed, the serial cable (12) that corresponds to the first external terminal connection unit claimed and the parallel cable (18) that corresponds to the second external terminal connection unit claimed.

18. Regarding Claim 22, Gish further discloses a switch (34) that corresponds to the second switching unit claimed and is disposed in an electrical pathway (42, 44) between the serial cable (12) that corresponds to one of the external terminal devices claimed and the interface that corresponds to the network connection unit claimed so that in a first state (i.e., open) the pathway is disconnected and in a second state (i.e., closed) the pathway is connected.

19. Regarding Claim 24, Gish further discloses a socket, pin and OR gate configuration (Fig. 1, reference 10, 28, 30) that corresponds to the detection unit claimed and determines which of

Art Unit: 2615

the cables the correspond to the external terminal devices claimed is connected (column 3, lines 5-42).

20. Regarding Claim 25, Gish discloses a modem (Fig. 1, reference 9) that corresponds to the telecommunication terminal device claimed and is operated according to a method (Fig. 2) comprising: if a serial interface that corresponds to the first external terminal device of a first type claimed is to be connected through the modem that corresponds to the telecommunication terminal device claimed to a telephone line (column 1, lines 30-34) that corresponds to the public telephone network claimed (Fig. 2, step 102, negative branch), establishing a serial connection interface (Fig. 2, steps 112, 114, 116; column 4, lines 7-12) between the telephone line that corresponds to the public telephone network claimed and the serial interface that corresponds to the first external terminal device of a first type claimed; if a parallel interface that corresponds to the second external terminal device of a second type claimed is to be connected through the modem that corresponds to the telecommunication terminal device claimed to a telephone line (column 1, lines 30-34) that corresponds to the public telephone network claimed (Fig. 2, step 102, positive branch), establishing a parallel connection interface (Fig. 2, steps 104, 106, 108; column 4, lines 1-6) between the telephone line that corresponds to the public telephone network claimed and the parallel interface that corresponds to the second external terminal device of a second type claimed. Gish further discloses that a serial device cannot be connected to a parallel interface and a parallel device cannot be connected to a serial interface (column 1, lines 13-60).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee.**

23. Regarding Claim 7, as shown above apropos of Claim 1, Lee anticipates all elements except at least an additional terminal connection unit connected to the fifth and sixth pins. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See *in re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Allowable Subject Matter

24. **Claims 9, 16, 19, 21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

25. Regarding Claim 9, as shown above apropos of Claim 1, Lee anticipates all elements except the connections being parallel and serial, respectively. There is no teaching or suggestion in the reference or the knowledge of one skilled in the art to modify the device taught by Lee to have parallel and serial connections, respectively. As such, Claim 9 is allowable matter.

26. Regarding Claim 16, as shown above apropos of Claim 13, Gish anticipates all elements except disconnecting an established connection regardless of the state of the switching unit. In Gish, the connection state is established solely by the state of the gate (30) that corresponds to

Art Unit: 2615

the switching unit claimed. There is no teaching or suggestion in the reference or the knowledge of one skilled in the art to modify the device taught by Gish to have an independent disconnection device. As such, Claim 16 is allowable matter.

27. Regarding Claim 19, as shown above apropos of Claim 17, Gish anticipates all elements except the switching unit disposed in connection between pins of the network connection unit and pins of the first external terminal connection unit. In Gish, the gate (30) that corresponds to the switching unit claimed is not disposed in connection with the telephone line interface that corresponds to the network connection unit claimed. There is no teaching or suggestion in the reference or the knowledge of one skilled in the art to modify the device taught by Gish to make such a connection. As such, Claim 19 is allowable matter.

28. Claims 21 and 23 are allowable matter due to dependence from Claim 19.

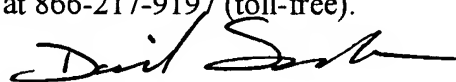
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow
Primary Examiner
Art Unit 2615

ds

17 March 2006